FINEVISION

TRIFOCAL INTRAOCULAR LENS

FineVision lets you look at the world with a fresh pair of eyes.
Learn how you could enjoy the freedom of vision without spectacles.[1]

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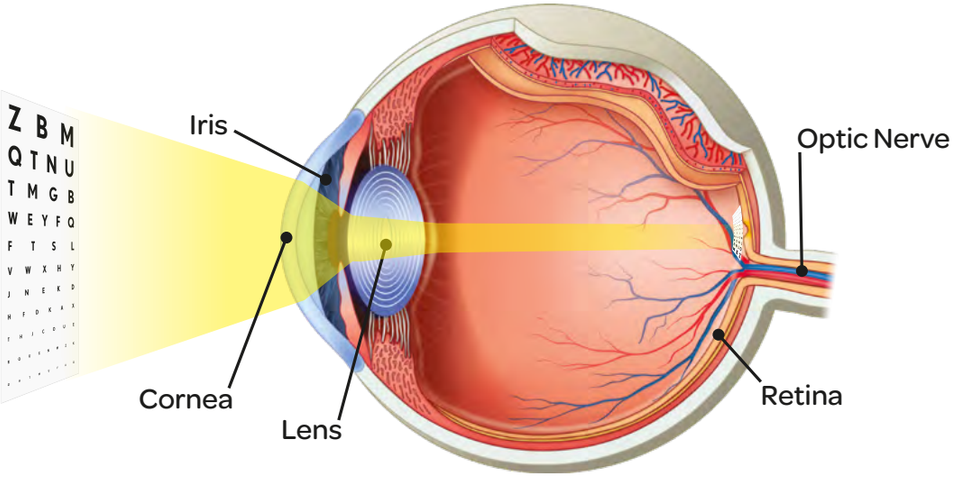
See better. Live better.

finevision.com.au



Vision and Ageing

Every day one simple action comes first, we open two little windows and start to take in a new day. With the precious gift of sight we experience all that is around us. Protecting and enhancing that gift is what drives us at Bausch + Lomb; See better. Live better.

As we age, common tasks such as reading, driving (particularly at night) or using a computer become more difficult. This can be caused by a condition called presbyopia, which happens naturally to everyone, as people age. Some people will also develop cataracts, a clouding of the eye's lens resulting in blurred vision.

Whether you have presbyopia or cataracts, your dream to see clearly without glasses is possible through modern eye surgery. Your ophthalmologist will discuss suitable treatment options for your eye condition.

This brochure will answer some of your questions about presbyopia and cataracts.

How does the eye work?

When you see an object, the cornea acts as a clear window on the front of your eye, transmitting and focusing light into the eye. The cornea performs two thirds of the focusing.

The lens in the eye performs the remaining third of the focusing by working in a similar way to a camera lens, focusing light rays onto the retina at the back of the eye.
The retina then reads the light rays and sends the focused image to the brain via the optic nerve which allows you to see.

Sources of common visual complaints

Even if you've never worn spectacles or contact lenses, chances are you know about nearsightedness (myopia), farsightedness (hyperopia) and astigmatism, all are types of refractive errors.

Refractive errors occur when the shape of the eye prevents light from focusing directly on the retina. The length of the eyeball (either longer or shorter), changes in the shape of the cornea, or ageing of the lens can cause refractive errors.
Most people have one or more of these conditions.

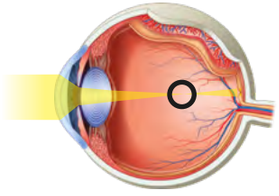


Image focused
in front of the retina

Nearsighted

A condition where objects up close appear clearly, while objects far away appear blurry. With nearsightedness, light comes to focus in front of the retina instead of on the retina.

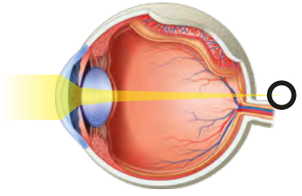
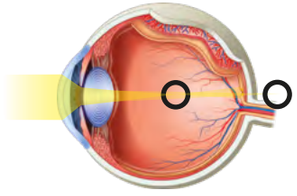


Image focused
behind the retina

Farsighted

A common type of refractive error where distant objects may be seen more clearly than objects that are near. Light focuses behind the retina instead of on the retina.



Multiple focal
points

Astigmatism

Is an irregularity in the curvature of the cornea in which light fails to come to a single focus on the retina to produce clear vision. Instead, multiple focus points occur, either in front of the retina or behind it causing vision to be blurred or distorted to some degree at all distances.

How our vision can change with age

Just like our bodies, our eyes have different needs as we age and several common eye problems can occur. Presbyopia and cataracts are a normal, natural part of our eyes' ageing process.

What is Presbyopia?
Presbyopia is a natural occurrence where near vision becomes blurred, making it hard to focus while doing things like reading, using a mobile phone or working on the computer. It is not a disease or illness; but it usually affects everyone during the natural ageing process.

What causes Presbyopia?
Before the age of 40, the eye's lens is soft and flexible, readily changing shape to see images from different distances. With age, the natural lens in your eye hardens and loses elasticity. With this loss of flexibility, your eyes are less able to adjust properly to focus upon near objects.

Common symptoms of Presbyopia:

- Eye-strain or headaches after reading or doing close visual work
- Difficulty reading small print or focusing on near objects
- Needing brighter lighting when reading or doing close work
- Holding reading material at an arm's distance to focus properly on it

Left to Right: Simulation of vision before and after cataract removal surgery.

Cataracts

Most age-related cataracts develop gradually. In the early stages you may not notice changes in your vision right away when there is good lighting but may experience difficulty driving at night or with vision in dim light conditions.
Certain factors can accelerate the appearance and progression of cataracts these include:

- smoking
- prolonged exposure to ultraviolet light
- various diseases

What are the symptoms of a cataract?
As cataracts develop the most common symptoms are:

- Cloudy or blurry vision
- Sensitivity to light and glare, a halo may appear around lights
- Increasing difficulty with vision at night
- Colours seem faded
- Frequent prescription changes in your glasses or contact lenses
- Double vision

These symptoms may also be a sign of other eye conditions. If you have any of these symptoms, please check with your ophthalmologist.

Treatment for presbyopia and cataracts*

Many people dealing with presbyopia or cataracts will begin wearing reading glasses or switch to bifocal glasses. Multifocal contact lenses are also an option.

Another option for presbyopic and cataract patients is a surgical procedure in which the human lens is replaced with an intraocular lens or IOL.

Lens replacement for people with Presbyopia*

Refractive lens exchange, also called lens replacement surgery or clear lens extraction, may be an alternative to LASIK, PRK (photorefractive keratectomy) or phakic IOL refractive surgery for people with presbyopia.

Refractive lens exchange (RLE) replaces your eye's natural lens with an artificial intraocular lens (IOL) in order to correct your refractive error and achieve sharper focus, reducing your need for reading glasses or bifocals.

The procedure for refractive lens exchange is virtually identical to cataract surgery.
The difference is that in RLE, the lens being replaced is clear, rather than a cloudy lens due to a cataract.

Refractive lens exchange may be a treatment option to other refractive procedures for presbyopia*.

*FineVision is used to replace the natural lens only after cataract surgery

Cataract Surgery

With cataract surgery, your eye's clouded lens is removed and replaced with a clear artificial lens implant (called an intraocular lens or IOL).

Cataract surgery is often performed as an outpatient procedure, under local anaesthesia and does not require an overnight hospital stay.
With the use of an ultrasonic probe, the lens is fragmented and then removed from the eye with gentle suction (called "aspiration"). Using an injector and via a very small incision, the surgeon puts the new intraocular lens into place.

Cataract surgery is generally safe and effective and is one of the most commonly performed surgeries in the world. Over 20 million people across the world undergo the procedure every year.[2]

Treatment with an Intraocular Lens (IOL)

An Intraocular Lens is a permanent artificial lens implant which replaces the natural lens removed during surgery. Intraocular Lenses are broadly divided into the following types:

Monofocal Intraocular Lenses
Monofocal IOLs provide clear vision at one focal point, usually both eyes are corrected for distance vision. An alternative to this is Monovision where one eye is corrected for distance and the other is corrected for near vision. With both options glasses will still be required for certain tasks, in particular for near and intermediate vision.

Bifocal Intraocular Lenses
Bifocal IOLs are a further option for the surgical replacement of the natural lens. These will correct for near and far vision, but offer limited intermediate vision which is important for many common tasks such as locking doors, cooking or computer work.

Trifocal Intraocular Lenses
FineVision, the first diffractive trifocal IOL that can provide optimal vision at **all distances without glasses.**[1]

Monofocal

Designed to correct vision at one distance

Bifocal

Designed to correct far and near vision.

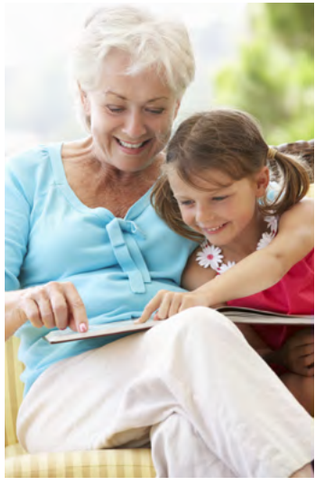
Trifocal (FineVision)

Designed to correct the full range of vision: Far, Intermediate and Near vision.

Above: Close up of the trifocal design in FineVision. Inset: Actual size FineVision IOLs

Far vision

Intermediate vision



Near vision

How do FineVision lenses work?

FineVision is a trifocal intraocular lens that features a series of rings which diffract light to provide – Far, Intermediate and Near vision, lending to the name FineVision.
FineVision features an innovative trifocal structure designed to significantly improve performance for intermediate vision.

The design of FineVision is different to multifocal or bifocal glasses. You don't have to worry about moving your head to see clearly or even walking down stairs, as the lens is implanted in the eye.
Many patients implanted with FineVision don't need to wear glasses for everyday tasks such as driving, reading the car speedometer or even using their smart phone.[1]

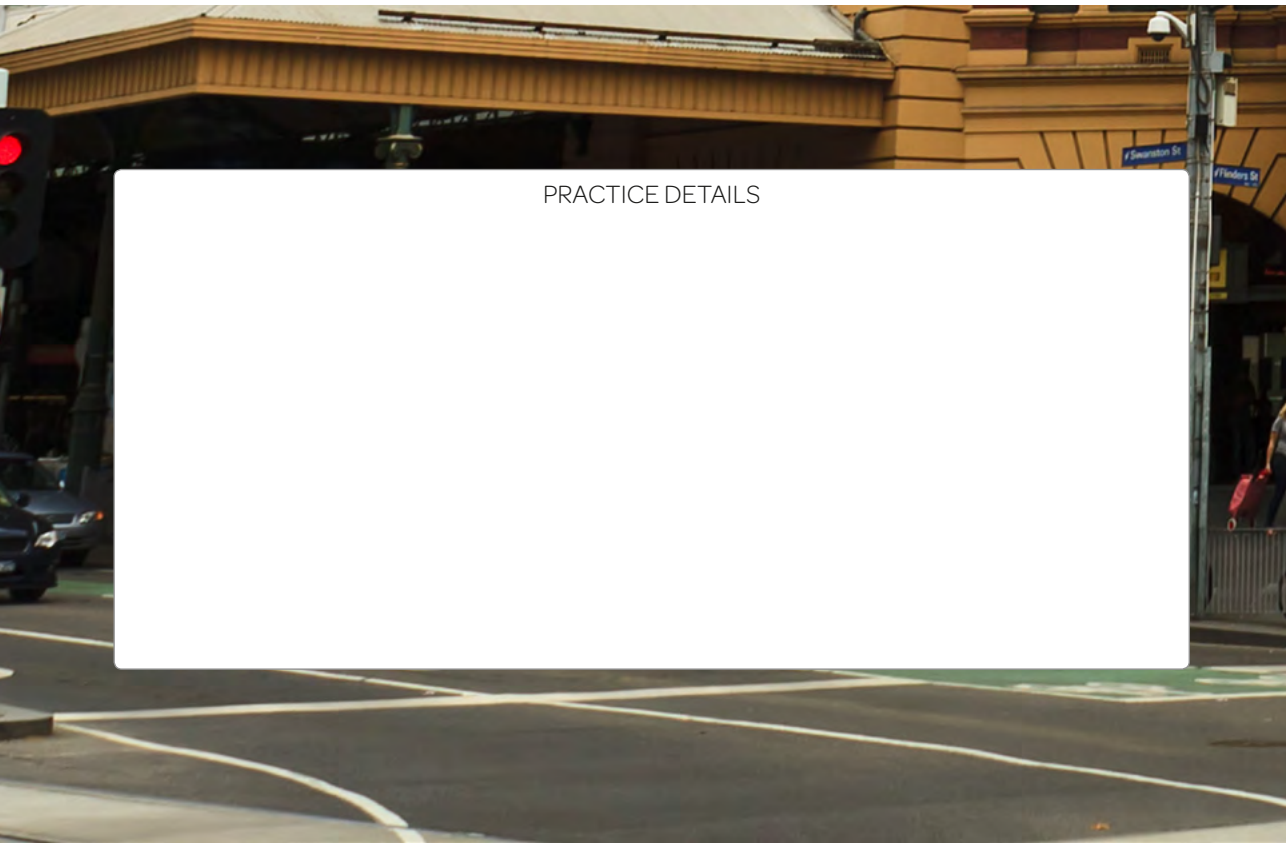
FineVision Toric IOL
FineVision can also correct for Astigmatism. This means that with a single surgical procedure FineVision can address your cataract, astigmatism and hyperopia or myopia while providing vision at far, intermediate and near - this could eliminate your need for glasses, even if you have worn glasses your whole life.[1]

What to expect after implantation

With FineVision, you may no longer need glasses:
- to read, write, use your smart phone or perform close work;
- to work on your computer, cook or do anything requiring good intermediate vision at distances of 40 cm to 1 m;
- for all of your daily activities that are better without glasses, such as sports and going for walks.

Your vision after surgery
- Vision improves over time as the brain learns to adapt to the trifocal lens.
- Vision improvements are more rapid when both eyes are implanted.
- Halos and glare may be present at night and are often experienced prior to surgery, but these too are expected to improve with time.[3]

Simulated image of halos and glare at night.



PRACTICE DETAILS

finevision.com.au

Visit the FineVision Website to learn more about FineVision Intraocular Lenses.

Your ophthalmologist will advise whether this product is suitable for your condition. Any surgical procedure carries risks. Before proceeding, you should seek further advice from a qualified eye care practitioner.

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1 *Daya S, Espinosa M;* The FineVision Trifocal Lens, ESCRS 2011. **2** Market Scope June 2010: Report of Global IOL Market. **3** *Vryghem J.C, Heireman S;* Early results with the implantation of a new trifocal diffractive IOL ASCRS 2011